

Remarks

Claims 1-5 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1, 2, 4, and 5 have been amended to change “grain product” to “animal feed product” and to make consistent the use of open and closed form language. Reconsideration and withdrawal of the §112 rejection for indefiniteness is respectfully requested.

Claims 1, 3 and 5 are objected to for various informalities. Claims 1 and 5 have been amended as suggested by the Examiner. Claim 3 has been canceled. It is respectfully asserted that these amendments have fully addressed the objections raised by the Examiner.

Claims 1-5 are rejected under 35 U.S.C. §102 as being anticipated by each of Huiston et al., Matyas et al., and Fahnenschich et al. Reconsideration and withdrawal of this ground of rejection in view of the foregoing amendments to the claims and these remarks is respectfully requested.

Independent claims 1 and 4 have been amended to require that at least 0.03 weight percent of the active ingredients be one or more antioxidants. New independent claims 6 and 10 require that antioxidants be present in the amount of at least 0.0006 pounds per ton of animal feed product treated.

Huiston et al. teaches a composition for treating crops having moisture contents of 13.4% (column 2, lines 25 and 56; column 3, line 40), 16.7% (column 2, line 56), and 25% (column 4, line 2). The water content of these crops is much lower than the water content of the animal feed products treated under the present invention. Those skilled in the art recognize that the challenge in protecting animal feed products increases dramatically with water content. In addition, the animal feed products treated by the present invention have been subject to processing whereby the seed covering, cell walls, and similar plant structures have been breached, making the processed animal feed product a much more active substrate for microbial growth than the whole, unprocessed crops of Huiston et al. Further, Huiston et al. teaches only organic acids and not the use of an antioxidant or surfactant as recited in the present form of the claims. Reconsideration of the §102 rejection based on Huiston et al. is respectfully requested.

Maytas et al. teaches solid powders including carboxylic acids for treating vegetable matter. Maytas et al. teaches only carboxylic acids and nothing with respect to the use of antioxidants or surfactants. Fig. 2 of the Maytas et al. reference is a plot of temperature change over time (days) of a sample of maize treated using a propionic acid powder as taught by the Maytas et al. reference (the figure also includes data on a control and two comparison treatments). As described by Maytas et al., the temperature of the sample is a measurement of microbial activity. An increase in temperature indicates an increase in microbial activity. All of the samples illustrated in Fig. 2 showed an initial increase in temperature. In contrast, animal feed products treated under the present invention show no increase in microbial growth for at least 7 days and this is recited in the present form of the claims. Reconsideration and withdrawal of the 102 rejection based on Maytas et al. is respectfully requested.

Fahnentstich et al. teaches the use of propylene glycol esters of propionic acid to improve the quality of silage. Fahnentstich et al. teaches nothing whatsoever about the use of antioxidants. Applicant fails to understand how the teaching of propylene glycol esters of propionic acid has any relevance to the present invention in which propionic acid and propylene glycol are two separate possible ingredients. Just having these two ingredients present in a formulation does not mean that any significant amount of propylene glycol esters of propionic acid will be present. There is no teaching or suggestion in any of the references cited by the Examiner that these would be present and the Examiner has presented no evidence or argument to that effect. Moreover, Fahnentstich et al. is teaching the use of these materials to improve the quality of silage. Those skilled in the art know that it is critical that silage treatments promote rather than inhibit the growth of preferred microbes, particularly lactic acid-producing bacteria. Clearly, the Fahnentstich et al. reference is not relevant to an animal feed product treatment that prevents an increase in microbial growth for at least seven days.

The application has been amended to further distinguish the application over the prior art, and to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention so as to place the application, as a whole, into a prima facie condition for allowance. Great care has been taken to avoid the introduction of new subject matter into the application as a result of the foregoing modifications.

Accordingly, the purpose of the claimed invention is not taught nor suggested by the cited references, nor is there any suggestion or teaching which would lead one skilled in the relevant art to combine the references in a manner which would meet the purpose of the claimed invention. Because the cited references, whether considered alone, or in combination with one another, do not teach nor suggest the purpose of the claimed invention, Applicant respectfully submits that the claimed invention, as amended, patentably distinguishes over the prior art, including the art cited merely of record.

Based on the foregoing, Applicant respectfully submits that its claims 1-2 and 4-15 are in condition for allowance at this time, patentably distinguishing over the cited prior art. Accordingly, reconsideration of the application and passage to allowance are respectfully solicited.

The Examiner is respectfully urged to call the undersigned attorney at (515) 288-2500 to discuss the claims in an effort to reach a mutual agreement with respect to claim limitations in the present application which will be effective to define the patentable subject matter if the present claims are not deemed to be adequate for this purpose.

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Respectfully submitted,



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